



Montana Sheep and Lamb Loss 2007

Cooperating with the Montana Department of Agriculture
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Montana Sheep and Lamb Loss 2007

Total Loss, Cause of Death and Value of Loss

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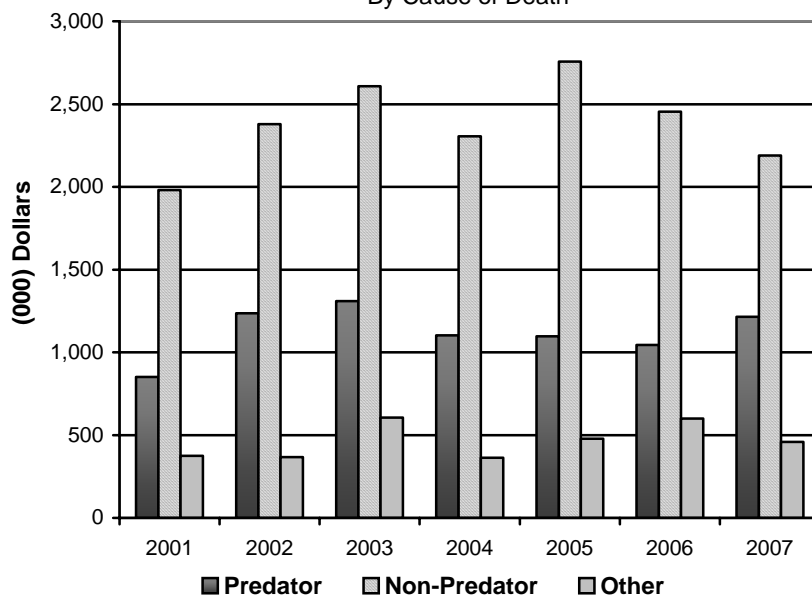
Montana sheep and lamb producers lost 50,000 animals to weather, predators, disease and other causes during 2007, representing a total value of \$3.9 million, according to a survey conducted by USDA, National Agricultural Statistics Service, Montana Field Office. The total number of sheep and lambs lost decreased 1,000 head from last year, but the total value of inventory lost was 6 percent less than a year ago. The January 1, 2007 inventory was 2 percent less than the previous year. Sheep and lamb deaths amounted to 8.7 percent of the January 1 inventory and lambs born, unchanged from last year.

The number of sheep and lambs lost to all predators totaled 17,000 head, up 2,900 head from last year. Lamb losses by all predators amounted to 13,900 head, up 21 percent from last year. The number of sheep lost to all predators totaled 3,100, up 500 head from a year ago. Predators caused an estimated \$1.2 million in losses in 2007, up 16 percent from the previous year. Losses due to predators amounted to 2.9 percent of the January 1 inventory and lambs born and 34 percent of all sheep and lamb deaths. Coyotes remained the largest predator for both sheep and lambs. Coyotes accounted for 69 percent of the predator caused losses and 23 percent of all death losses in the state. The value of losses attributed to coyotes was \$0.8 million.

The total value of non-predatory losses was \$2.2 million in 2007, compared with \$2.5 million in 2006. Non-predatory losses accounted for 55 percent of all losses. The largest non-predatory cause of losses was diseases at 7,800 head. Sheep lost to non-predatory factors totaled 8,800 head, 4 percent lower than 2006. Non-predatory lamb losses came in at 18,700 head, 1,700 head lower than a year ago.

Producers reported less sheep and lambs lost to unknown causes this past year. The number of sheep and lambs lost to unknown causes decreased 25 percent from last year. Lambs lost to unknown causes totaled 3,400 head, compared with 5,100 head last year. Unknown causes claimed 2,100 sheep, compared with 2,200 head last year. The value of sheep and lambs lost to unknown causes decreased to \$0.5 million.

Value of Sheep & Lamb Losses, 2001-2007
By Cause of Death



Methodology and Definitions

The sheep and lamb survey utilized multi-frame sampling procedures. The survey involved drawing a random sample from a list of livestock producers maintained by the USDA, National Agricultural Statistics Service, Montana Field Office. In addition, sheep producers living in a selected sample of area segments were interviewed. This procedure assures complete coverage of sheep producers by accounting for ranchers/farmers who may not be on the list.

Sheep and lamb loss estimates published by the USDA include sheep losses for the entire year, but include only those lamb losses that occur after docking. This special report also includes an estimate of lambs lost before docking.

Cooperation

This study was undertaken at the request of the Montana Wool Growers Association who also provided funding. The USDA, National Agricultural Statistics Service, Montana Field Office conducted the survey and expresses appreciation to all cooperating sheep producers.

Table 1: Sheep & Lambs: Inventory, Death Loss, and Percent of Total Inventory Lost, Montana, 1998-2007.

Year	January 1 Inventory	Lamb Crop	All Sheep Losses	Lamb Losses			Total Loss	Percent of Total Inventory Lost 1/
				Before Docking	After Docking	All Lambs		
	(000) Head							
1998	415	355	20	25	22	47	67	8.4
1999	380	340	18	23	23	46	64	8.6
2000	370	365	19	23	24	47	66	8.7
2001	360	340	19	24	23	47	66	9.1
2002	335	295	18	25	24	49	67	10.2
2003	310	280	17	21	20	41	58	9.5
2004	300	270	13	17	14	31	44	7.5
2005	305	275	12	19	15	34	46	7.6
2006	295	270	14	20	17	37	51	8.7
2007	290	270	14	18	18	36	50	8.7

1/ Total inventory equals January 1 inventory plus lamb crop plus lambs lost before docking

Table 2: Sheep & Lambs: Death Losses by Cause and Value of Loss, Montana, 1998-2007.

Year	Predator Losses		Non-Predator Loss	Unknown Causes	Value of Losses			
	Total	Percent of Total Inventory Lost 1/			Predator	Non Predator	Unknown	Total 2/
	(000) Head	Percent			(000) Dollars			
1998	21.8	2.7	38.7	6.5	1,105.5	2,189.8	360.2	3,655.5
1999	20.3	2.7	36.8	6.9	1,094.7	2,198.8	410.2	3,703.7
2000	18.9	2.5	37.3	9.8	1,079.1	2,423.1	609.7	4,111.9
2001	19.9	2.7	38.6	7.5	850.8	1,980.6	375.0	3,206.4
2002	21.4	3.3	39.9	5.7	1,236.0	2,378.2	366.6	3,980.8
2003	17.7	2.9	33.0	7.3	1,309.2	2,608.0	605.7	4,522.9
2004	13.7	2.3	26.0	4.3	1,102.6	2,306.2	364.3	3,773.1
2005	12.4	2.1	28.4	5.2	1,096.4	2,755.6	477.6	4,329.6
2006	14.1	2.4	29.6	7.3	1,044.4	2,453.7	600.3	4,098.4
2007	17.0	2.9	27.5	5.5	1,214.4	2,189.3	458.0	3,861.7

1/ Total inventory equals Jan 1 inventory, plus lamb crop plus lambs lost before docking.

2/ Totals may not add because of rounding.

Table 3: Sheep & Lambs: Death Losses by Cause, Montana 2006-2007.

Cause of Loss	SHEEP LOSS				LAMB LOSS				TOTAL LOSS			
	Number of Head		Value in Dollars (000) 1/		Number of Head		Value in Dollars (000) 2/		Number of Head		Value in Dollars (000)	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Predators												
Bear	300	400	39.3	48.0	200	300	12.2	18.2	500	700	51.5	66.2
Bobcat	--	--	--	--	--	--	--	--	--	--	--	--
Coyote	1,800	1,900	235.8	228.0	8,300	9,800	508.0	593.9	10,100	11,700	743.8	821.9
Dog	100	300	13.1	36.0	500	400	30.6	24.2	600	700	43.7	60.2
Eagle	--	--	--	--	1,100	800	67.3	48.5	1,100	800	67.3	48.5
Fox	--	--	--	--	700	1,100	42.8	66.7	700	1,100	42.8	66.7
Mountain Lion	200	100	26.2	12.0	300	300	18.4	18.2	500	400	44.6	30.2
Wolf	100	200	13.1	24.0	100	400	6.1	24.2	200	600	19.2	48.2
Other Animals	--	--	--	--	--	--	--	--	--	--	--	--
Unknown Predators	100	200	13.1	24.0	300	800	18.4	48.5	400	1,000	31.5	72.5
Total Predators	2,600	3,100	340.6	372.0	11,500	13,900	703.8	842.4	14,100	17,000	1,044.4	1,214.4
Non-Predators												
Total Diseases	1,600	2,800	209.6	336.0	5,000	5,000	306.0	303.0	6,600	7,800	515.6	639.0
Lambing Complications	800	1,100	104.8	132.0	5,600	5,600	342.7	339.4	6,400	6,700	447.5	471.4
Old Age	3,000	3,000	393.0	360.0	--	--	--	--	3,000	3,000	393.0	360.0
On Back	500	600	65.5	72.0	100	--	6.1	--	600	600	71.6	72.0
Poison	700	700	91.7	84.0	900	500	55.1	30.3	1,600	1,200	146.8	114.3
Theft	100	--	13.1	--	400	100	24.5	6.1	500	100	37.6	6.1
Weather Conditions	2,300	400	301.3	48.0	6,900	6,500	422.3	393.9	9,200	6,900	723.6	441.9
Other	200	200	26.2	24.0	1,500	1,000	91.8	60.6	1,700	1,200	118.0	84.6
Total Non-Predators	9,200	8,800	1,205.2	1,056.0	20,400	18,700	1,248.5	1,133.3	29,600	27,500	2,453.7	2,189.3
Unknown Causes	2,200	2,100	288.2	252.0	5,100	3,400	312.1	206.0	7,300	5,500	600.3	458.0
Total Loss	14,000	14,000	1,834.0	1,680.0	37,000	36,000	2,264.4	2,181.7	51,000	50,000	4,098.4	3,861.7

1/ Using average reported value for Ewes 1+.

2/ Lamb values equal to market year average price received for lambs multiplied by an average weight of 60 pounds per lamb.

-- Denotes less than 100 head.

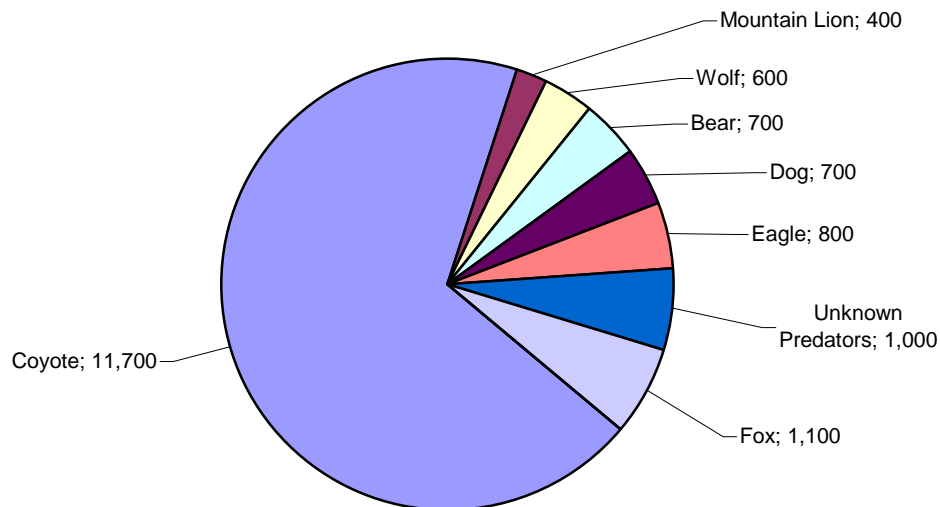
Sheep and Lamb Loss by Predators 2007

Table 4: Sheep & Lambs: Percent of Death Losses by Cause, Montana, 1998-2007.

Cause of Loss	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Predators										
Bear	--	--	1	1	1	1	2	1	1	1
Bobcat	--	--	--	--	--	--	--	--	--	--
Coyote	22	24	20	22	21	20	21	19	20	23
Dog	2	1	2	2	1	2	2	1	1	2
Eagle	3	3	2	2	2	2	2	2	2	2
Fox	3	2	2	1	2	2	2	2	1	2
Mountain Lion	1	1	1	1	1	1	1	--	1	1
Wolf	--	--	--	--	1	1	1	1	1	1
Other Animals	--	--	--	--	--	--	--	--	--	--
Unknown Predators	1	1	1	2	2	2	1	1	1	2
Total Predators	32	33	28	30	31	30	31	27	28	34
Non-Predators										
Digestive	2/	5	2/	2/	2/	2/	7	2/	2/	2/
Respiratory	2/	8	2/	2/	2/	2/	10	2/	2/	2/
Metabolic	2/	2	2/	2/	2/	2/	2	2/	2/	2/
Other Diseases	2/	4	2/	2/	2/	2/	3	2/	2/	2/
Total Diseases	14	19	15	16	12	14	22	17	13	16
Lambing Complications	14	11	12	11	12	15	11	13	13	13
Old Age	7	6	9	8	4	6	8	7	6	6
On Back	1	2	2	1	1	2	1	2	1	1
Poison	3	2	3	2	2	2	2	3	3	2
Theft	1	2	1	1	1	3	--	1	1	1
Weather Conditions	15	13	11	13	20	11	12	15	18	14
Other	2	2	5	7	7	5	3	5	3	2
Total Non-Predators	57	57	57	58	60	57	59	62	58	55
Unknown Causes	10	11	15	12	9	13	10	11	14	11
Total Loss 1/	100	100	100	100	100	100	100	100	100	100

1/ Totals may not add due to rounding.

-- Denotes less than 1 percent.

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Agricultural Statistician